CLAIMS

1. A method of separating an endo isomer and an exo isomer of a dicarboxylic acid represented by a general formula (1) or (2) or a derivative thereof, comprising the step of stirring and mixing a mixture comprising mainly the endo isomer of the dicarboxylic acid represented by the general formula (1) or (2) or a derivative thereof, and the exo isomer of the dicarboxylic acid represented by the general formula (1) or (2) or a derivative thereof, with a basic compound and a solvent:

[Formula 1]

(wherein, R₁ to R₈ represent a hydrogen atom, methyl group, ethyl group, or butyl group),

[Formula 2]

$$R'_{7}$$
 R'_{8} R'_{10} R'_{10} R'_{6} R'_{5} R'_{4} O OH (2)

(wherein, R'₁ to R'₁₀ represent a hydrogen atom, methyl group, ethyl group, or butyl group).

2. The method of separating an endo isomer and an exo isomer according to claim 1, comprising the step of stirring and mixing a mixture comprising mainly an endo isomer and an exo isomer of a dicarboxylic acid represented by the general formula (1) or a derivative thereof, with a basic compound and a solvent.

- 3. The method of separating an endo isomer and an exo isomer according to claim 2, wherein the basic compound is used in a quantity that achieves at least 0.2 equivalents relative to the endo isomer, and no more than 8 equivalents relative to the mixture.
- 4. The method of separating an endo isomer and an exo isomer according to either claim 2 or 3, wherein the solvent is used in a quantity of at least 0.7 g relative to 6 mmol of the mixture, and no more than the larger of either 10 g relative to 6 mmol of the mixture or 20 g relative to 6 mmol of the endo isomer.
- 5. The method of separating an endo isomer and an exo isomer according to any one of claims 2 through 4, wherein the dicarboxylic acid represented by the general formula (1) or a derivative thereof is 5-norbornene-2,3-dicarboxylic acid or a derivative thereof.
- 6. The method of separating an endo isomer and an exo isomer according to claim 1, comprising the step of stirring and mixing a mixture comprising mainly an endo isomer and an exo isomer of a dicarboxylic acid represented by the general formula (2) or a derivative thereof, with a basic compound and a solvent.
- 7. The method of separating an endo isomer and an exo isomer according to claim 6, wherein the basic compound is used in a quantity that achieves at least 0.35 equivalents and no more than 8 equivalents relative to the mixture.
- 8. The method of separating an endo isomer and an exo isomer according to either claim 6 or 7, wherein the solvent is used in a quantity of at least 0.7 g relative to 6 mmol of the mixture, and no more than 20 g relative to 6 mmol of the mixture.
- 9. The method of separating an endo isomer and an exo isomer according to any one of claims 6 through 8, wherein the dicarboxylic acid represented by the general formula (2) or a derivative thereof is norbornane-2,3-dicarboxylic acid or a derivative thereof.

10. A method of separating an endo isomer and an exo isomer of a salt of a dicarboxylic acid represented by a general formula (1) or (2), comprising the step of stirring and mixing a mixture comprising mainly the endo isomer of the salt of the dicarboxylic acid represented by the general formula (1) or (2), and the exo isomer of the salt of the dicarboxylic acid represented by the general formula (1) or (2), with a solvent:

[Formula 3]

$$R_{6}$$
 R_{7}
 R_{8}
 R_{8}
 R_{9}
 R_{1}
 R_{2}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{4}
 R_{5}
 R_{4}
 R_{5}
 R_{4}
 R_{5}
 R_{4}
 R_{5}
 R_{5}
 R_{4}
 R_{5}
 R_{5}
 R_{4}
 R_{5}
 R_{5}
 R_{6}
 R_{7}
 R_{8}
 R_{7}
 R_{8}
 R_{9}
 R_{1}
 R_{2}
 R_{3}
 R_{4}
 R_{5}
 R_{4}
 R_{5}
 R_{4}
 R_{5}
 R_{5

(wherein, R₁ to R₈ represent a hydrogen atom, methyl group, ethyl group, or butyl group),

[Formula 4]

$$R'_{7}$$
 R'_{8}
 R'_{9}
 R'_{10}
 R'_{10}
 R'_{6}
 R'_{5}
 R'_{4}
 O
 OH
 OH
 OH
 OH
 OH

(wherein, R'₁ to R'₁₀ represent a hydrogen atom, methyl group, ethyl group, or butyl group).

- 11. The method of separating an endo isomer and an exo isomer according to claim 10, comprising the step of stirring and mixing a mixture comprising mainly an endo isomer and an exo isomer of a salt of a dicarboxylic acid represented by the general formula (1), with a solvent.
- 12. The method of separating an endo isomer and an exo isomer according to claim 11,

wherein the salt of the dicarboxylic acid represented by the general formula (1) is a salt of 5-norbornene-2,3-dicarboxylic acid.

- 13. The method of separating an endo isomer and an exo isomer according to claim 10, comprising the step of stirring and mixing a mixture comprising mainly an endo isomer and an exo isomer of a salt of a dicarboxylic acid represented by the general formula (2), with a solvent.
- 14. The method of separating an endo isomer and an exo isomer according to claim 13, wherein the salt of the dicarboxylic acid represented by the general formula (2) is a salt of norbornane-2,3-dicarboxylic acid.
- 15. The method of separating an endo isomer and an exo isomer according to any one of claims 1 through 14, further comprising the step of filtering a mixture obtained from the stirring and mixing step, and either obtaining an endo isomer of a salt of the dicarboxylic acid represented by the general formula (1) or (2) as a liquid phase, or obtaining an exo isomer of a salt of the dicarboxylic acid represented by the general formula (1) or (2) as a solid phase.
- 16. The method of separating an endo isomer and an exo isomer according to claim 15, further comprising the step of obtaining an endo isomer or an exo isomer of the dicarboxylic acid represented by the general formula (1) or (2), from the endo isomer or the exo isomer of the salt of the dicarboxylic acid represented by the general formula (1) or (2).
- 17. The method of separating an endo isomer and an exo isomer according to either claim 15 or 16, further comprising the step of obtaining an endo isomer or an exo isomer of an anhydride of the dicarboxylic acid represented by the general formula (1) or (2) from the endo isomer or the exo isomer of the dicarboxylic acid represented by the general formula (1) or (2) or a salt thereof.

- 18. An endo isomer of a dicarboxylic acid represented by the general formula (1) or (2) or a derivative thereof, obtained using the method according to any one of claims 1 through 17.
- 19. An exo isomer of a dicarboxylic acid represented by the general formula (1) or (2) or a derivative thereof, obtained using the method according to any one of claims 1 through 17.